MULTI-PROTOCOL FIELD DEVICE AND COMMUNICATION METHOD

ABSTRACT OF THE INVENTION

A multi-protocol smart field device uses a Fieldbus communication protocol to communicate process control information and uses a HART communication protocol to enable local configuration of the field device via a hand-held HART communicator. The multi-protocol smart field device includes a first communications interface communicatively coupled to a digital data bus that is adapted to process HART communications which are received from and which are sent to a HART hand-held communicator. The multi-protocol smart field device further includes a second communications interface communicatively coupled to the digital data bus that is adapted to process Fieldbus communications. Additionally, the multi-protocol smart field device includes a first filter coupled between the first communications interface and the digital data bus that substantially attenuates signals having frequencies associated with Fieldbus communications and a second filter coupled between the second communications interface and the digital data bus that substantially attenuates signals having frequencies associated with HART communications.